

*Additional Summary.*

*Species considered valid, but requiring generic revision.*

- Reduvius guttatus*, Walk. Cat. Het. vii. p. 181. n. 7 (1873), belongs to gen. *Homalocoris*.  
 — *semifasciatus*, Walk. loc. cit. p. 202. n. 66, belongs to gen. *Pirates*.  
 — *coleopteroides*, Walk. loc. cit. p. 203. n. 69, belongs to gen. *Hiranetis*.

*Species treated as synonymic.*

- Reduvius negamicus*, Walk. Cat. Het. vii. p. 191. n. 38 (1873), =  
*Tilumnus scenicus*, Stål, var. *sobrinus*, Stål.  
 — *erythrinus*, Walk. loc. cit. p. 200. n. 61, = *Cydnocoris gilvus*, Burm.  
*Spiniger limbifer*, Walk. loc. cit. p. 166. n. 61, = *Inara flavopicta*, Stål.  
 — *conflictus*, Walk. loc. cit. n. 62, = *Inara flavopicta*, Stål.

XXXI.—*Some new Spiders from the Camaroons collected by  
 Mr. G. L. Bates.* By R. I. POCOCK.

So far as arachnological collecting is concerned, Mr. G. L. Bates has lately eclipsed his previous exploits by discovering the Oriental genus *Calommata* in W. Africa. The other new species recorded in these pages need no special mention.

Family *Aviculariidae*.

Genus *BATESIELLA*, nov.

Allied to *Phoneyusa*, but with the protarsal scopula of the first leg covering only the distal half of the segment, of the second covering only the distal third, of the third and fourth occupying only the apical sixth; fourth leg much longer than first, third as long as first; tibia and protarsi of third and fourth furnished with numerous suberect curved bristles, giving a characteristic "bottle-brush" appearance to the segments, the short hairs clothing the segments at the base of these bristles thick and squamuliform.

*Batesiella crinita*, sp. n.

♀.—*Colour* of body mouse-brown; femora of anterior legs and palpi deep greyish brown, the remaining segments noticeably rufescent.

*Carapace* with cephalic region rather high and with deep grooves, as long as patella, tibia, and tarsus of palp, longer

than patella + tibia of first or fourth leg, shorter than protarsus + tarsus of fourth.

*Legs* with inferior apical protarsal spines; no spines on tibiæ; patella + tibia of first and fourth subequal, patella + tibia of third subequal, their sum about equal to the protarsus of this appendage; protarsus of third as long as protarsus + tarsus of second; protarsus of fourth almost as long as patella + tibia of this limb, tarsus of fourth a little more than one third the length of the protarsus; tarsi of third and fourth distally tapering.

*Measurements in millimetres.*—Total length 32; length of carapace 13, palp 19, first leg 29, second 26, third 28, fourth 35.

*Loc.* Efulen, in the Camaroons (*G. L. Bates*).

### Family Atypidæ.

Genus CALOMMATA, Luc.

*Calommata Simoni*, sp. n.\*

♀.—*Colour.* Carapace clear testaceous, with darker stains on the cephalic region; mandibles pale ochre-yellow, darker externally; labium pale or infuscate; legs pale testaceous, with the distal segment sometimes lightly infuscate; abdomen dull greyish brown or dirty testaceous.

*Carapace* as in the typical species *C. fulvipes* from the Sunda Islands.

*Mandible* also as in that species, except that the teeth on the lower side form a single row curving inwards at the distal end of the series.

*Labium* and *sternum* as in *C. fulvipes*.

*Palpi* as in the latter, except that the convex elevation at the base of the upperside of the tibia is higher; maxillary process longer and much more strongly curved in its distal portion.

*Legs* of first and second pairs as in *C. fulvipes*; third and fourth pairs also as in that species, but much more thickly spinous.

*Abdomen* as in *C. fulvipes*.

*Measurements in millimetres.*—Total length (large specimen) 26; length of carapace 10, width 7; length of basal segment of mandible 6.5, of fang 8, of palpus 11, first leg 14, second 13, third 14, fourth 15.

*Loc.* Efulen, in the Camaroons (*G. L. Bates*).

\* I have great pleasure in dedicating this species to Mons. E. Simon, as a slight tribute to the industry, ability, and unvarying courtesy to others, with which he has pursued the study of arachnology.

The chief structural differences between *C. fulvipes* and *C. Simoni* may be briefly tabulated as follows:—

- a. The distal teeth of the row running along the underside of the mandible forming an isolated internal series close to the inner fringe of hairs; the posterior (external) edge of the maxillary process forming a concave curve corresponding to the convex curve of the adjacent segments of the palp when the femur of the latter lies vertically; third and fourth legs much less thickly spinous, only about a dozen spines on the anterior side of the tibia of the fourth. *fulvipes*.
- b. Distal teeth on underside of mandible forming a continuous curved series with the remainder, but not reaching the internal fringe; posterior (external) border of maxillary process with its concave curvature much stronger than the convex curvature of the basal segments of the palp when the femur lies vertically, *i. e.* when the apex touches the underside of the femur a space equalling at least half the width of the maxilla separates the two; third and fourth legs much more thickly spinous, about thirty or forty spines on the anterior side of the tibia of the fourth. *Simoni*.

Up to the present time the remarkable and isolated genus *Calommata* of Lucas has been represented by a single species, *C. fulvipes*, Luc., from Java and Sumatra; one, *C. obesum*, from Bankok; one, *C. truculentum*, from Burma; and one, *C. signatum*, from Japan. These forms are not distinguishable by their diagnoses, and are, perhaps, identical. Moreover, the genus was held to be confined to South-eastern Asia\*. Little was it to be expected that it would turn up in tropical West Africa †. Mr. G. L. Bates is to be very much congratulated on this unexpected discovery, which adds one more to the many interesting novelties we owe to his industry.

### Family Pisauridæ.

#### Genus DOLOMEDES, Latr.

##### *Dolomedes actæon*, sp. n.

♀.—*Colour*. Carapace deep brown, obscurely marbled with olive-brown and yellow patches; a large triangular

\* *C. fulvipes* was based upon a specimen alleged to have come from Bahia. In Keyserling's collection, now in the British Museum, there is a specimen ticketed "Bahia," and labelled as Lucas's type. This specimen I cannot distinguish specifically from a Javan specimen in the Museum, which is presumably identical with *Pelecodon sundaica*, Dol.

† Mr. Oldfield Thomas reminds me that this remarkable case of distribution has several parallels amongst the Mammalia, notably that of the rodent *Nannosciurus*, which is represented by species inhabiting Borneo, the Philippines, and the Camaroon district of West Africa.

yellow patch on each side of the posterior slope; legs rather obscurely banded above, with broad alternating darker and lighter bands; upperside of abdomen clothed with short yellowish and olive-brown hairs, forming broad indistinct transverse bands, with specks of brighter yellow hairs forming a narrow interrupted lateral band; ventral surface uniformly olive-yellow, a slightly darker median ventral band on the abdomen, broader in front and margined with an indistinct narrow pale line.

*Carapace* high, flat along the top, a little longer than patella + tibia + tarsus of palp, a little shorter than tibia of third leg and half the length of its tibia + protarsus.

*Vulva* large, the lateral lobes enclosing a more or less oval space occupied by a large sclerite, triangularly pointed and elevated in front and somewhat sharply constricted behind, where it juts between the extremities of the lateral lobes.

*Measurements in millimetres.*—Total length 31; length of carapace 14.5, first leg 64, second 65, third 59, fourth 71.

*Loc.* Efulen, in the Camaroons (*G. L. Bates*).

The difference in colour between the type of this species and that of *D. palpiger* is too great to permit the view that they belong to the same species.

This is the first female example of the genus *Dolomedes* recorded from tropical Africa.

*Dolomedes Batesii*, sp. n.

♀.—*Colour.* Legs banded as in *D. actæon*; carapace without the posterior spots, covered with short greyish-red hairs, mottled, but showing no definite pattern; darker on the middle dorsal line; middle of clypeal area occupied by a broad vertical brown stripe, broader below and set off by the pale hairs clothing the sides of the clypeus.

Apart from colour-differences this species differs from *D. actæon* in having the eyes of the anterior line recurved by their centres instead of straight, the lower edge of the laterals being on a level with the centres of the medians, and their upper edge rather higher than that of the medians.

*Vulva* very large and convex, its central sclerite closing the space except for a triangular area in front, and almost indistinguishably fused to the lateral portions; it is roundish in shape, without any anterior angular process, thus differing markedly from that of *D. actæon*.

*Measurements in millimetres.*—Total length 23; length of carapace 11, first leg 50, second 50, third 45, fourth 57.

*Loc.* Efulen, in the Camaroons (*G. L. Bates*).

*Dolomedes palpiger*, sp. n.

♂.—*Colour*. Integument of carapace ochre-brown, clothed with olive-brown hairs above; clypeus, sides of head, and margins of thoracic portion clothed with white hairs, forming a broad band; mandibles brownish, clothed with longish yellowish-brown hairs; legs yellowish brown, clothed above with reddish-yellow hairs; sternum adorned like the legs; upperside of abdomen dark, clothed with deep golden-brown hairs, with a narrowish white lateral band extending to the spinners; ventral surface olive-brown, with yellowish hairs.

*Carapace* longer than broad, longitudinally flat above, the posterior area abruptly sloped; width equal to the length between the posterior border and the posterior lateral eye; its length about equal to half that of the patella + tibia of second or fourth leg and as that of patella + tibia of palp.

*Palpi* long, reaching apex of patella of first leg; tibia longer than patella, lightly incrassate, armed externally near the apex with a narrow subspiniiform process projecting almost at right angles and not abutting against the tarsus, which is as long as the tibia and half the patella, inflated, piriform, and strongly arched.

*Legs* long and slender.

*Measurements in millimetres*.—Total length 20; length of carapace 10, width 8.5; length of palp 19, second leg 54, third 46, fourth 57.

This species may be distinguished from *D. transfuga*, Poc., from the Benito River (P. Z. S. 1899, p. 869), by the form of the tibial apophysis and the slightly longer palpi. In *D. transfuga* the palpi scarcely reach the middle of the patella of the first leg, although in the original description they are in error described as extending past the middle of the tibia.

## Family Heteropodidæ.

## Genus CTENUS.

*Ctenus coccineipes*, sp. n.

♀.—*Colour*. Carapace deep mahogany, clothed with short yellowish-grey hairs; no red hairs on the clypeus or mandibles, the latter shining black in front, with black setæ, covered with greyish pubescence at the sides; sternum and coxæ sooty black; palpi blackish brown; femur with some reddish hairs below; legs blackish, with greyish pubescence above; the femora with a coating of short blood-red hairs

below, deeper in tint on the first and second than on the third and fourth pairs, the scopulæ ashy black; abdomen blackish, covered above with a coating of greyish hairs, laterally and inferiorly with blood-red hairs; some stripes of the same colour on the dorsal surface; the middle line of the ventral surface occupied by a median black band, which gradually expands anteriorly to the width of the epigastric area, which is black.

*Carapace* longitudinally flat above, as long as patella + tibia of third leg, as protarsus of fourth, as tibia of first, as tarsus and protarsus of second, longer than tarsus and protarsus of third.

*Vulva* differing from that of *C. scopulatus*, Poc., from the Benito River (P. Z. S. 1899, p. 871, pl. lvii. fig. 25), in being wider than long, fairly evenly oval transversely, though with an anterior shallow emargination, and in having the lateral uncate processes thinner and much less prominent.

*Measurements in millimetres*.—Total length 29; length of carapace 12, first leg 42, second 40, third 33, fourth 43.

*Loc.* Efulen, in the Cameroons (*G. L. Bates*).

Distinguishable by the brilliant red coloration of the underparts of the femora and abdomen.

*Ctenus Batesii*, sp. n.

♀.—As large as *C. scopulatus*, Poc. (P. Z. S. 1899, p. 871), but much blacker in colour; no red hairs on face or mandibles; legs uniformly dusky except for some coppery hairs at the extremities above; abdomen almost entirely black above, laterally, and below.

*Mandibles* sparsely hairy, highly polished, and blue-black.

*Eyes* of anterior ocular triangle smaller than in *C. scopulatus*, and apparently further apart, the distance between the anterior and posterior medians equalling a diameter of the former.

*Vulva* differing from that of *C. scopulatus* in that the emargination for the lateral uncate process is nearer the middle of the lateral border, the area in front of it being much shorter in *C. Batesii* than in *C. scopulatus*. The vulva is more like that of *C. Kingsleyi*, but is broader, both the anterior "neck" and the posterior portion between the uncate processes being less constricted.

*Measurements in millimetres*.—Total length 31; length of carapace 15, first leg 49, second 45, third 37, fourth 48.

*Loc.* Efulen, in the Cameroons (*G. L. Bates*).

The females of the five large West-African species of

*Ctenus*, of which the types are in the British Museum, may be distinguished as follows:—

- a. Median ventral area of abdomen black.
- a<sup>1</sup>. Median black area narrow, expanding in front, sharply defined from the more lateral portions of the lower surface: femora crimson beneath . . . . . *coccineipes*.
- b<sup>1</sup>. Ventral area of abdomen either entirely black or mostly covered with a broadly parabolic black shield.
- a<sup>2</sup>. Abdomen almost entirely black, the median ventral area only a little more intense than the rest; mandibles and face without red hairs . . . . *Batesii*.
- b<sup>2</sup>. Black shield on ventral area of abdomen broad and sharply contrasted from the rusty red hairs of its lateral and dorsal surface; mandibles and face with red hairs . . . . . *scopulatus*.
- b. Median ventral area of abdomen brown and ornamented, like the rest of the lower surface, with pale spots running into longitudinal stripes.
- a<sup>3</sup>. Carapace longer than patella + tibia iii., and equal to protarsus iv. . . . . *occidentalis*.
- b<sup>3</sup>. Carapace slightly shorter than patella + tibia iii., and considerably shorter than protarsus iv. . . . . *Kingsleyi*.

#### Genus TORANIA, Sim.

##### *Torania scutata*, sp. n.

♀.—*Colour*. Integument of carapace pale, with faint dark stripes, clothed with yellowish hairs; ocular area blackish; mandibles pale, with two faint stripes, infusate distally; palp pale, with black tarsus; legs pale, minutely speckled, with black spines and dark greyish scopulae; labium, maxillae, sternum, and underside of coxae jet-black; lower side of abdomen covered with a jet-black shield, slightly narrowing posteriorly and reaching to the spinners, which are pale; upperside of abdomen covered with hairs of a greyish-yellow hue.

Structurally resembling *T. variata*, Poc., but without anterior spine on patellae.

♂.—Resembling female in colour, differing from the male of *T. variata*, Poc., in the much wider interval that separates the apices of the two branches of the tibial spur of the palp.

*Measurements in millimetres*.—♀. Total length 15; length of carapace 6, first leg 27, second 29, third 22, fourth 23.

♂. Total length 13; length of carapace 7, first leg 37, second 40, third 30, fourth 31.

*Loc.* Efulen, in the Camaroons (*G. L. Bates*).

Easily to be distinguished from *T. occidentalis* and *variata* by colouring.